Texas HIV Epidemiologic Profile

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- **Appendix A: Select Characteristics of Persons Newly Diagnosed with HIV and Persons Living with HIV, by Health Delivery Service Area (HSDA), 2015 (PDF : 591 kb)**
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Epi Profile Section 1 - Executive Summary

This epidemiologic profile was created to assist planners, public health professionals, policy makers and other stakeholders at the local and state level. It is a snapshot of the Human Immunodeficiency Virus (HIV) epidemic in Texas at the end of 2015. The data are drawn primarily from routine disease and vital statistics surveillance systems, and supplemented by studies on special populations at high-risk for HIV and persons living with HIV who are currently in HIV medical care. More detailed information on data sources can be found in *Data Sources Used for this Profile*.

The face of HIV in Texas is increasingly young, Black or Hispanic, and male. The vast majority of new infections and diagnoses occur in gay or other men who have sex with men (MSM). For the past 10 years, the rate of new diagnoses in young persons, especially young MSM of color, has increased compared to other demographic groups. In Texas, we estimate that over 4% of young Black MSM age 18-24 were infected with HIV in 2015 (see section *Men who have sex with Men*).

Racial disparities permeate the HIV epidemic in Texas. Black and Hispanic Texans have higher rates of HIV diagnoses than White Texans. Black Texans living with HIV experience higher rates of STD co-infections (see section *Co-Morbidities*), which has a negative impact on their health and increases the risk of transmitting HIV to others. Once Black and Hispanic Texans are infected with HIV, they face challenges in accessing regular medical care and achieving viral suppression (see section *The HIV Care Continuum in Texas*), a condition where the levels of HIV virus in the body are undetectable to most commercially available diagnostic tests. Persons with suppressed viral loads are much less likely to transmit HIV to others. A detailed exploration of factors which contribute to racial disparities in the HIV epidemic is outside the scope of this report. More information can be found at CDC National Center for HIV/AIDS, Viral Hepatitis, STDs and TB Prevention's website.

Over 82,000 Texans are known to be living with HIV. This does not include the nearly 14,315 persons (17.3% of all persons living with HIV) [CDC] the CDC estimates to be living with HIV and unaware of their infection . The longer persons with HIV live, the longer they will need to practice HIV prevention methods which reduce the risk of HIV transmission. In the past, HIV prevention methods focused on reducing high-risk behaviors, with a focus on condomless sex. However, these behavioral risk reduction programs are resource-intensive to implement and difficult to scale to a population level, and permanent behavior change at the individual level can be difficult to achieve and sustain over time (see section *Indicators of HIV-risk in Persons living with HIV currently in care*).

A variety of methods to prevent HIV are now available in addition to behavioral risk reduction and barrier methods (i.e. condoms). A once-daily pill, called Pre-exposure Prophylaxis (or PrEP) can be used by HIV-negative persons to greatly reduce their risk of contracting HIV through any mode of transmission, including injection drug use and sexual contact. New evidence also shows that PLWH who have suppressed viral loads are much less likely to transmit the virus to others. Our current challenge is to ensure that all PLWH and persons at high risk of acquiring HIV can access and afford the prevention methods most appropriate for them.

This report does not describe all aspects of the HIV epidemic in Texas. Our goal is to provide a broad overview and basic understanding of where we are today. Persons interested in more detailed analysis

or data on specific populations are welcome to send their data requests to the HIV/STD/TB Epidemiology team at TBHIVSTDdata@dshs.texas.gov.

Epi Profile Section 2 - New HIV Diagnoses

- **Figure 2-1.** HIV in Texas; People Living with HIV, New HIV Diagnoses, and Deaths Due to HIV, 2006 - 2015
- **Figure 2-2.** Rate of New HIV Diagnoses in Texas by Race/Ethnicity, 2006 - 2015
- **Table 2-1.** New HIV Diagnoses and Rates among Texans by Race/Ethnicity and Sex, 2015
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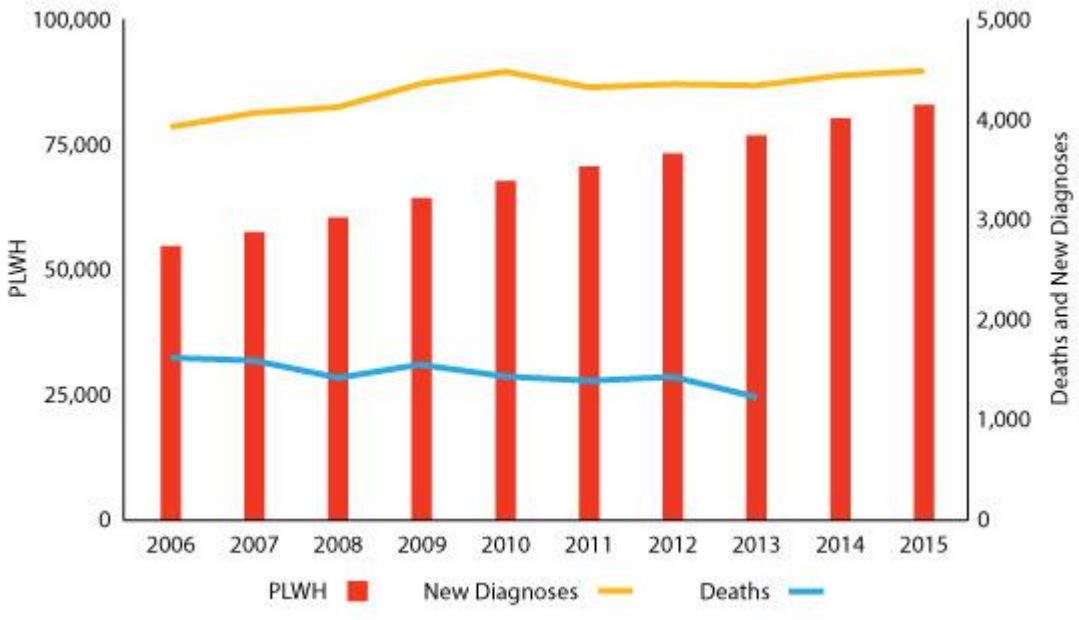
- **Table 2-5.** Five Year Trends in HIV Diagnoses, Texas, 2015

Figure 2-1. HIV in Texas; People Living with HIV, New HIV Diagnoses, and Deaths Due to HIV, 2006 - 2015

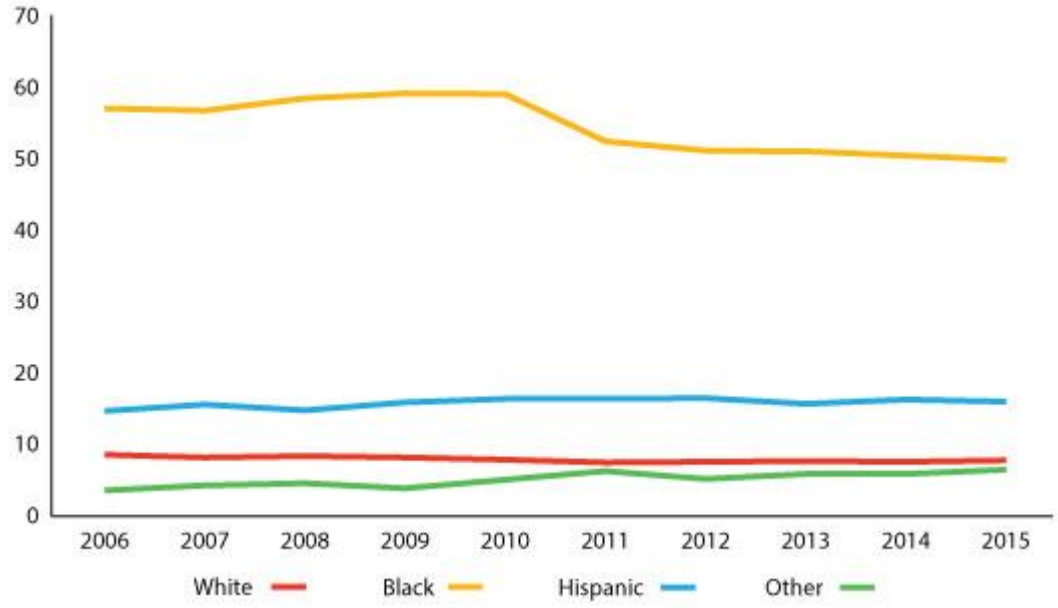


Data on deaths is only available through 2013 due to a 2-year lag in complete death reporting from the National Social Security Index

Data for Figure 2-1

- In 2015, 4,486 cases of HIV were newly diagnosed in Texas, an increase of 1% from the previous year. The annual number of newly diagnosed HIV cases has remained constant through the last 10 years.
- Effective treatment has extended the lifespans of Persons Living With HIV (PLWH). As fewer persons with HIV die from HIV-related causes, the number of PLWH continues to increase as new persons are newly diagnosed. The number of deaths in PLWH declined by 14% from 2014 to 2015.
- As of the end of 2015, over 82,000 persons in Texas were known to be living with HIV. The CDC estimates that an additional 18,000 persons in Texas are living with HIV and are unaware of their infection.

Figure 2-2. Rate of New HIV Diagnoses in Texas by Race/Ethnicity, 2006 - 2015



Data for Figure 2-2

- Racial disparities in the rate of new HIV diagnoses persist despite declines in the rate of new HIV diagnoses among Black Texans.

- The rates of new HIV diagnoses appear to have remained consistent in Whites, Hispanics, and persons of Other Races over the past 10 years while the rate in Blacks has decreased. These trends are affected by population growth in Texas during this time period. The Black population in Texas increased by 26% since 2005, while the number of new diagnoses in Blacks only increased by 3% - in other words, population growth outpaced new diagnoses. The number of new diagnoses in Hispanics increased by 27%, while the population of Hispanics grew by 33%, resulting in stable rates of new diagnoses.

Table 2-1. New HIV Diagnoses and Rates among Texans by Race/Ethnicity and Sex, 2015

	Males			**Females**			**Total**		
Race/Ethnicity	**Number**	**%**	**Rate**	**Number**	**%**	**Rate**	**Number**	**%**	**Rate**
White	812	22%	13.6	128	15%	2.1	940	21%	7.8
Black	1,199	33%	74.5	458	54%	26.7	1,657	37%	49.8
Hispanic	1,481	41%	27.6	225	27%	4.2	1,706	38%	16.0
Other	77	2%	11.0	17	2%	2.3	94	2%	6.5
Unknown	75	2%	-	14	2%	-	89	2%	-
TOTAL	**3,644**	**81%**	**26.7**	**842**	**19%**	**6.1**	**4,486**	**100%**	**16.3**

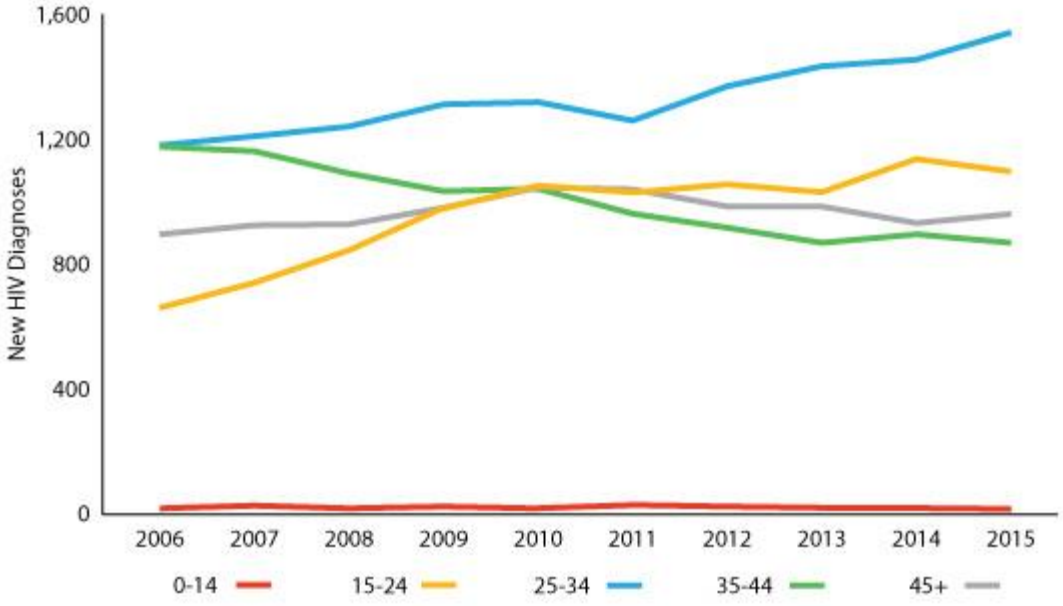
- Despite the fact that Blacks comprise only 12% of the Texas population, over a third of all new HIV diagnoses among in Texas were among Blacks.
- The vast difference in rate of new diagnoses per 100,000 population between Hispanics and Blacks, despite nearly equal numbers of new diagnoses, are a result of the much larger population of Hispanics in Texas. Hispanic persons newly diagnosed with HIV make up a smaller proportion of the Hispanic population compared to Blacks.
- The racial disparity in new HIV diagnoses is most stark among females, where Black females have 5.4 times the rate of new diagnoses compared to racial group with the next highest rate.

Table 2-2. New HIV Diagnoses in Texas by Age Group and Sex, 2015

	Males			Females			Total		
Age (years)	**Number**	**%**	**Rate**	**Number**	**%**	**Rate**	**Number**	**%**	**Rate**
0-14	6	0.2%	0.2	11	1.3%	0.4	17	0.4%	0.3
15-24	974	26.7%	47.8	123	14.6%	6.4	1,097	24.5%	27.7
25-34	1,293	35.5%	63.5	249	29.6%	12.6	1,542	34.4%	38.4
34-44	660	18.1%	35.8	209	24.8%	11.3	869	19.4%	23.5
45+	711	19.5%	15.3	250	29.7%	4.9	961	21.4%	9.8
TOTAL	**3,644**	**81%**	**26.7**	**842**	**19%**	**6.1**	**4,486**	**100%**	**16.3**

- The majority of persons newly diagnosed with HIV are between the ages of 15-34.
- However, the age profile for persons newly diagnosed varies by sex. A higher proportion of newly diagnosed females are over the age of 25 compared to males. This is likely explained by a recent increase in new infections among young men who have sex with men (MSM) (see Section 10: *Men who have Sex with Men*).
- The overall age profile of new HIV diagnoses remains largely young persons because less than 20% of new HIV diagnoses in Texas are among women.

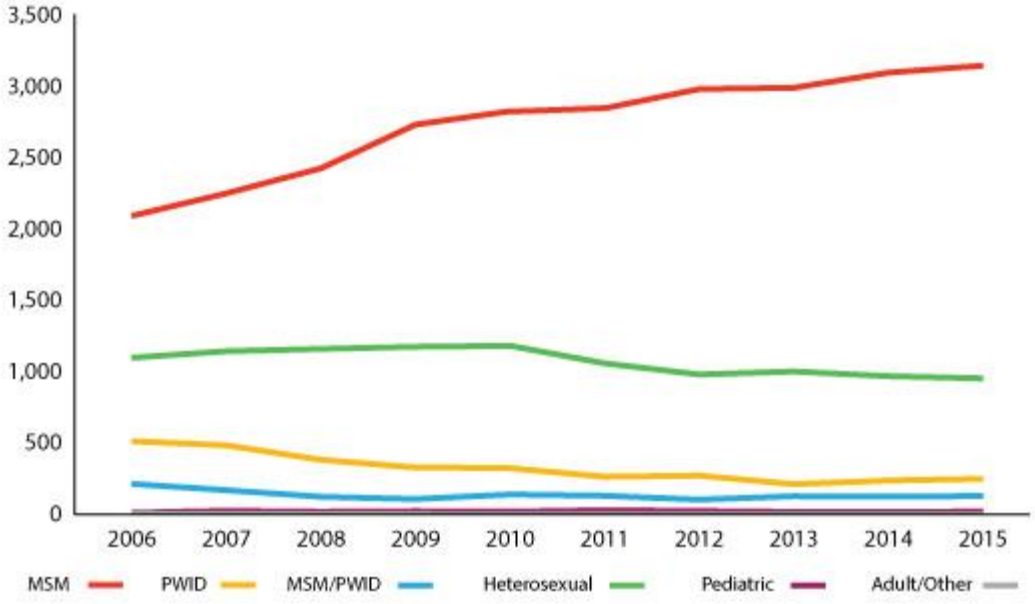
Figure 2-3. New HIV Diagnoses in Texas by Age Group, 2006 - 2015



Data for Figure 2-3

- The number of new diagnoses in young persons age 15-24 has nearly doubled over the last 10 year, while the number of new diagnoses in persons 25-34 has also increased.
- An increased availability of HIV testing, both through targeted and routine screenings, may be contributing to the decline in new diagnoses among persons over age 35 can be diagnosed earlier in their infections.

Figure 2-4. New HIV Diagnoses in Texas by Mode of Exposure, 2006 - 2015



Data for Figure 2-4

- The majority of new HIV diagnoses in Texas are among men who have sex with men (MSM). The proportions of new diagnoses attributable to male-male sexual contact has increased by 32% since 2006. The HIV epidemic is now largely driven by MSM transmission in Texas.
- The declining number and proportion attributable to Persons who Inject Drugs (PWID) and Heterosexual contact indicates that prevention efforts with these groups have been effective.

Table 2-3. HIV Diagnoses in Texas by Mode of Exposure and Sex, 2015

	Males		Females		Total	
Exposure Category	**N**	**%**	**N**	**%**	**N**	**%**
MSM	3,141	86.2%	0	0.0%	3,141	70.0%
IDU	123	3.4%	125	14.8%	248	5.5%
MSM/IDU	128	3.5%	0	0.0%	128	2.9%
Heterosexual	246	6.8%	706	83.8%	952	21.2%

Table 2-3. HIV Diagnoses in Texas by Mode of Exposure and Sex, 2015						
	Males		**Females**		**Total**	
Exposure Category	**N**	**%**	**N**	**%**	**N**	**%**
Pediatric	6	0.2%	11	1.3%	17	0.4%
Adult Other	0	0%	0	0%	0	0%
Total	3,644	81.2%	842	18.8%	4,486	100.0%

- The majority of new HIV diagnoses in Texas males are attributable to male-male sexual contact.
- In females, the majority of new diagnoses are attributable to heterosexual sexual contact. Females have a higher biological risk of acquiring HIV from heterosexual contact compared to males. This may partially explain the disproportionately lower number of diagnoses in heterosexual males attributable to heterosexual contact compared to females.

Table 2-4. New HIV Diagnoses in Texas by Mode of Exposure and Race/Ethnicity, 2015										
	White		**Black**		**Hispanic**		**Other**		**Unknown**	
Exposure Category	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
MSM	706	75.1%	1,009	60.9%	1,297	76.0%	66	70.2%	63	70.8%
IDU	75	8.0%	106	6.4%	59	3.5%	4	4.3%	4	4.5%
MSM/IDU	47	5.0%	30	1.8%	47	2.8%	2	2.1%	2	2.2%
Heterosexual	109	11.6%	503	30.4%	299	17.5%	22	23.4%	19	21.3%
Pediatric	3	0.3%	9	0.5%	4	0.2%	0	0.0%	1	1.1%
Total	940	21.0%	1,657	36.9%	1,706	38.0%	94	2.1%	89	2.0%

- In all race groups, MSM comprised the majority of new diagnoses.

- The largest number and proportion of new diagnoses attributable to heterosexual infection occur in Blacks and Hispanics.
- It is important to note that a proportion of newly diagnosed HIV cases are reported with no identified risk. DSHS assigns these persons to risk groups based on their most likely mode of exposure according to a CDC-developed algorithm. While these assignments are based on years of data, it is possible that a certain percentage of newly diagnosed cases may be categorized incorrectly.

Table 2-5. Five Year Trends in HIV Diagnoses, Texas, 2015

	Cumulative Through 2010		2011		2012		2013		2014		2015		5-year Cumulative 2011-2015	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Sex														
Male	97,750	83%	3,432	79%	3,519	81%	3,525	81%	3,616	81%	3,644	81%	17,736	81%
Female	20,359	17%	890	21%	834	19%	815	19%	824	19%	842	19%	4,205	19%
Race														
White	43,469	39%	876	20%	901	21%	918	21%	911	21%	940	21%	4,546	21%
Black	37,880	34%	1,591	37%	1,587	36%	1,619	37%	1,637	37%	1,657	37%	8,091	37%
Hispanic	27,237	24%	1,594	37%	1,642	38%	1,595	37%	1,696	38%	1,706	38%	8,233	38%
Other	724	1%	74	2%	64	1%	77	2%	80	2%	94	2%	389	2%
Unknown Race	2,199	2%	187	4%	159	4%	131	3%	116	3%	104	2%	682	3%
Age Group														
0-14	1,104	1%	30	1%	25	1%	15	0%	20	0%	17	0%	113	1%
15-24	14,722	13%	1,030	24%	1,056	24%	1,031	24%	1,137	26%	1,097	24%	5,351	24%

Table 2-5. Five Year Trends in HIV Diagnoses, Texas, 2015

	Cumulative Through 2010		2011		2012		2013		2014		2015		5-year Cumulative 2011-2015	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
25-34	42,105	38%	1,260	29%	1,370	31%	1,434	33%	1,455	33%	1,542	34%	7,061	32%
35-44	34,728	31%	962	23%	958	22%	924	21%	867	20%	892	20%	4,682	21%
45+	18,850	17%	1,040	24%	985	23%	985	23%	932	21%	961	21%	4,903	22%
Exposure														
MSM	63,577	57%	2,844	66%	2,977	68%	2,986	69%	3,092	70%	3,141	70%	15,040	69%
IDU	16,460	15%	263	6%	271	6%	211	5%	237	5%	248	6%	1,230	6%
MSM/IDU	8,917	8%	130	3%	102	2%	126	3%	124	3%	128	3%	610	3%
Heterosexual	20,812	19%	1,057	24%	979	22%	1,000	23%	967	22%	952	21%	4,955	23%
Pediatric	967	1%	28	<1%	23	1%	17	0%	20	0%	179	<1%	105	<1%
Adult Other	776	<1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

- The demographic profile of the HIV epidemic in Texas has changed since the beginning of the epidemic.
- In the first 30 years of the epidemic, persons diagnosed with HIV were mainly White MSM over the age of 25. By 2014, a person newly diagnosed with HIV was more likely to be young Black or Hispanic MSM under the age of 34.

Epi Profile Section 3 - Persons Living with HIV

- **Table 3-1.** Persons Living with HIV in Texas by Select Characteristics, 2015
- **Figure 3-1.** Percent of PLWH in Texas by Mode of Exposure
- **Map 3-1.** Rates of PLWH by County, Texas, 2015
- **Table 3-2.** PLWH in Texas by Metropolitan Area, 2015

Table 3-1. Persons Living with HIV in Texas by Select Characteristics, 2015

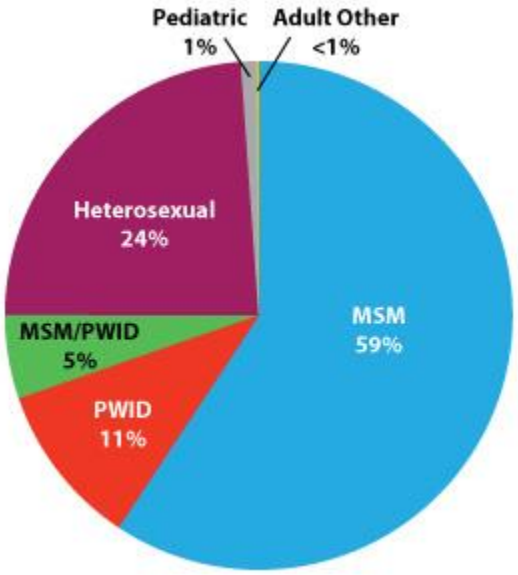
	Cases	%	Rates per 100,000 population
Sex			
Male	64,897	78%	475.9
Female	17,848	22%	129.0
Race			
White	22,222	27%	184.6
Black	31,009	37%	932.7
Hispanic	25,937	31%	243.1
Other	905	1%	63.0
Unknown	2,672	3%	-
Age (as of 12/31/2015)			
0-14	274	0%	4.6
15-24	3,977	5%	100.5
25-34	15,766	19%	393.0

Table 3-1. Persons Living with HIV in Texas by Select Characteristics, 2015

	Cases	%	Rates per 100,000 population
35-44	19,742	24%	534.4
45+	42,986	52%	439.6
Total	82,745		301.2

- Over 60% of Persons Living with HIV (PLWH) are Black or Hispanic. These groups tend to have lower rates insurance coverage and higher rates of poverty, which can negatively affect their ability to obtain adequate medical care for their HIV infection.
- Just over half of PLWH are over the age of 45. As HIV treatments improve, PLWH are able to lead nearly normal life spans.

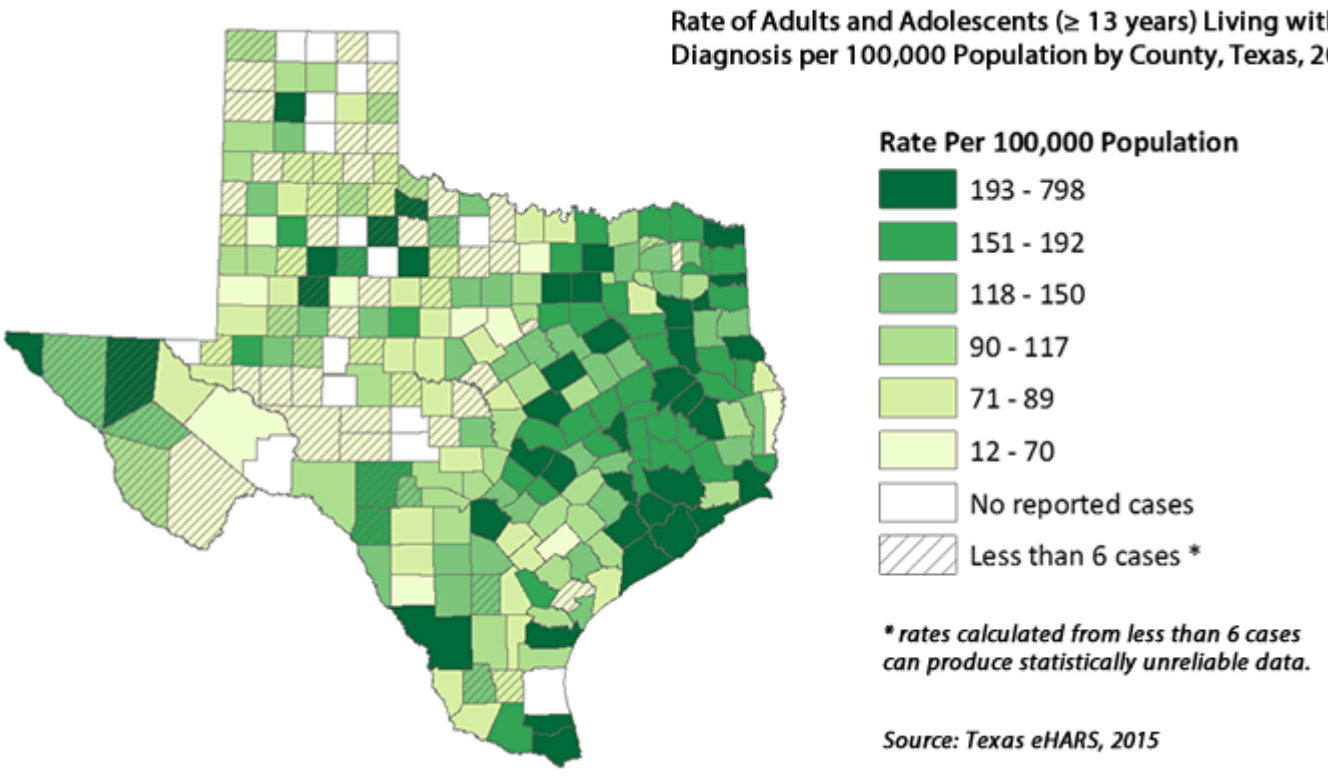
Figure 3-1. Percent of PLWH in Texas by Mode of Exposure



Adult Other includes received clotting factor, transfusion/transplant, other and unknown.
Source: Texas eHARS, 2015

- The majority of Persons Living with HIV (PLWH) acquired their infection through male-male sexual contact, followed by heterosexual contact.
- PLWH can greatly reduce their risk of transmitting the virus through any mode of transmission by keeping their viral loads (the amount of HIV in their bodies) to a very low level, also called viral suppression. Viral suppression can be achieved through consistent, adequate use of anti-retoviral medications.

Map 3-1. Rates of PLWH by County, Texas, 2015



PLWH data by county

- The rate of persons living with HIV varies greatly by county. In Texas, counties with high HIV prevalence rates tend to be urban (Dallas county, Harris county [Houston], Travis county [Austin], Bexar county [San Antonio]).

Table 3-2. PLWH in Texas by Metropolitan Area, 2015

	N	%
Austin TGA	5,521	7%
Dallas EMA	19,793	24%
Fort Worth TGA	5,396	7%
Houston EMA	26,041	31%
San Antonio TGA	6,096	7%
Other Texas	15,682	19%
TDCJ/ICE/Federal Prison	4,216	5%
Total	82,745	100%

- Dallas and Houston have the highest numbers of PLWH, which reflects the fact that nearly 40% of the Texas population lives in these two urban areas. PLWH may choose to live closer to urban areas where medical care is more accessible.

Epi Profile Section 4 - Co-Morbidities

- **Figure 4-1.** Chlamydia, Gonorrhea, and Primary & Secondary Syphilis Cases and Incidence Rates among PLWH in Texas, 2008-2015
- **Table 4-1.** STD Cases and Incidence Rates among PLWH in Texas, 2015
- **Table 4-2.** HIV+ Persons among Diagnosed STD Cases, Texas, 2015
- **Table 4-3.** Number and % of PLWH in 2015 with Tuberculosis Co-morbidity, by Sex

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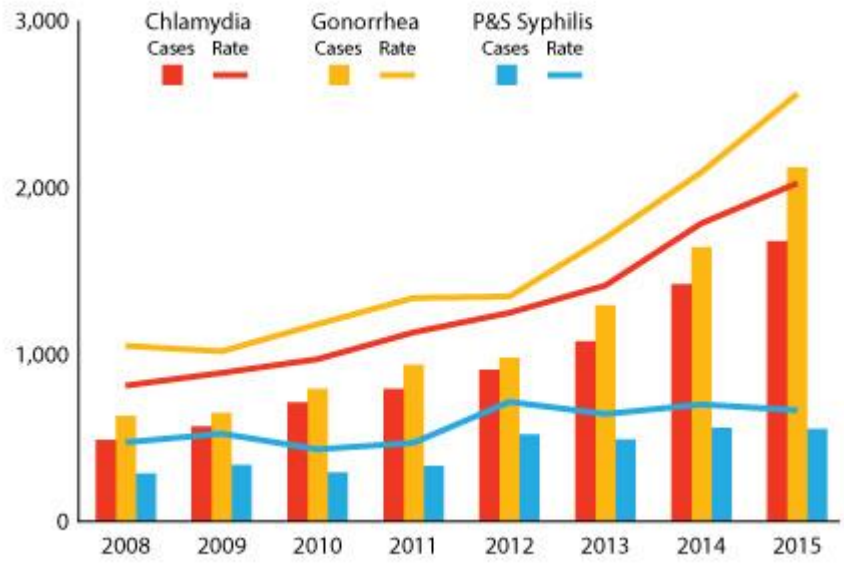
Figure 4-1. Chlamydia, Gonorrhea, and Primary & Secondary Syphilis Cases and Incidence Rates among PLWH in Texas, 2008-2015



Data for Figure 4-1

- A cross-registry match was performed between Texas' STD Surveillance data and Texas' enhanced HIV/AIDS Reporting System (eHARS) to determine how many STDs were diagnosed in Persons Living with HIV (PLWH) between 2006 and 2015.
- Persons living with HIV were considered to have an STD coinfection if their STD diagnosis occurred ≤ 30 days of their HIV diagnosis. Persons living with HIV may have >1 diagnosis of any STD. To calculate the rate of diagnoses among PLWH, we used the total number of STD

diagnoses in HIV positive persons as the numerator and the total number of PLWH as the denominator.

- Because chlamydia and gonorrhea infections are often asymptomatic, increases in the annual number and rate of chlamydia and gonorrhea diagnoses likely reflects increases in STD screening among PLWH.
- The number and rate of P&S Syphilis cases in PLWH are lower than chlamydia and gonorrhea; however, syphilis infections are much more prevalent in PLWH. In Texas, PLWH are 106 times more likely to be diagnosed with P&S Syphilis compared to HIV-negative persons.
- The disparity in chlamydia and gonorrhea case rates between PLWH and HIV-negative persons is not as large. PLWH are 4 times more likely to be diagnosed with chlamydia and 19 times more likely to be diagnosed with gonorrhea compared to HIV-negative persons.

Table 4-1. STD Cases and Incidence Rates among PLWH in Texas, 2015

		Chlamydia		Gonorrhea		P&S Syphilis		EL Syphilis	
	Total Cases	**Cases in PLWH**	**Rate**	**Cases in PLWH**	**Rate**	**Cases in PLWH**	**Rate**	**Cases in PLWH**	**Rate**
Total PLWH	82,745	1,672	2,020.7	2,114	2,554.8	546	659.9	1,105	1,335.4
Age Group									
0-14	274	0	0.0	0	0.0	0	0.0	0	0.0
15-24	3,977	319	8,021.1	462	11,616.8	92	2,313.3	137	3,444.8
25-34	15,766	725	4,598.5	942	5,974.9	234	1,484.2	409	2,594.2
35-44	19,742	348	1,762.7	399	2,021.1	114	577.4	278	1,408.2
45+	42,986	280	651.4	311	723.5	106	246.6	281	653.7
Race/Ethnicity									
White	22,222	311	1,399.5	484	2,178.0	127	571.5	309	1,390.5

Table 4-1. STD Cases and Incidence Rates among PLWH in Texas, 2015

		Chlamydia		Gonorrhea		P&S Syphilis		EL Syphilis	
	Total Cases	**Cases in PLWH**	**Rate**	**Cases in PLWH**	**Rate**	**Cases in PLWH**	**Rate**	**Cases in PLWH**	**Rate**
Black	31,009	704	2,270.3	890	2,870.1	179	577.3	316	1,019.1
Hispanic	25,937	581	2,240.0	640	2,467.5	213	821.2	424	1,634.7
Other	905	19	2,099.4	9	994.5	6	663.0	12	1,326.0
Unknown	2,672	57	-	91	-	21	-	44	-
Sex									
Female	17,848	250	1,400.7	118	661.1	10	56.0	13	72.8
Male	64,897	1,422	2,191.2	1,996	3,075.6	536	825.9	1,092	1,682.7
Current Residence									
Austin	5,521	217	3,930.4	306	5,542.5	77	1,394.7	116	2,101.1
Dallas	19,793	437	2,359.4	648	3,273.9	104	525.4	396	2,000.7
Houston	26,041	563	2,162.0	616	2,365.5	152	583.7	222	852.5
Fort Worth	5,396	83	1,538.2	134	2,483.3	59	1,093.4	106	1,964.4
San Antonio	6,096	109	1,788.1	164	2,690.3	72	1,181.1	120	1,968.5
Risk Group*									
MSM	42,080	1,196	2,842.2	1,727	4,104.1	450	1,069.4	961	2,283.7
Black MSM	11,162	440	3,941.9	684	6,127.9	145	1,299.1	275	2,463.7
Hispanic MSM	14.619	464	3,174.0	569	3,892.2	180	1,231.3	382	2,613.0
White MSM	14,597	246	1,685.3	400	2,740.3	102	698.8	256	1,753.8

Table 4-1. STD Cases and Incidence Rates among PLWH in Texas, 2015

		Chlamydia		Gonorrhea		P&S Syphilis		EL Syphilis	
	Total Cases	Cases in PLWH	Rate	Cases in PLWH	Rate	Cases in PLWH	Rate	Cases in PLWH	Rate

* The number of MSM LWH in this table differs from other DSHS reports because we did not use multiple imputation to assign mode of exposure to persons with no reported risk.

- The demographic profile of PLWH diagnosed with STDs is similar to that of persons diagnosed with STDs in the general population.
- Young PLWH age 15-34, Black and Hispanic PLWH, and MSM are more likely to receive an STD diagnosis.
- STD diagnoses in PLWH may be indicators of condomless sex. PLWH who engage in condomless sex can potentially transmit HIV and other STDs to their partners.

Table 4-2. HIV+ Persons among Diagnosed STD Cases, Texas, 2015

	Chlamydia			Gonorrhea			P&S Syphilis			EL Syphilis		
	Cases	Cases in PLWH	%	Cases	Cases in PLWH	%	Cases	Cases in PLWH	%	Cases	Cases in PLWH	%
	133,850	1,672	1.2%	37,539	2,114	5.6%	1,708	546	32.0%	2,491	1,105	44.4%
Age Group												
0-14	274	0	0.0%	300	0	0.0%	0	0	0.0%	4	0	0.0%
15-24	3,977	319	8.0%	20,499	462	2.3%	560	92	16.4%	635	137	21.6%
25-34	15,766	725	4.6%	11,434	942	8.2%	640	234	36.6%	929	409	44.0%
35-44	19,742	348	1.8%	3,307	399	12.1%	261	114	43.7%	495	278	56.2%

Table 4-2. HIV+ Persons among Diagnosed STD Cases, Texas, 2015

	Chlamydia			Gonorrhea			P&S Syphilis			EL Syphilis		
	Cases	**Cases in PLWH**	**%**	**Cases**	**Cases in PLWH**	**%**	**Cases**	**Cases in PLWH**	**%**	**Cases**	**Cases in PLWH**	**%**
45+	42,986	280	0.7%	1,983	311	15.7%	247	106	42.9%	428	281	65.7%
Race/Ethnicity												
White	22,222	311	1.4%	8,165	484	5.9%	448	127	28.3%	699	309	44.2%
Black	31,009	704	2.3%	13,095	890	6.8%	531	179	33.7%	774	316	40.8%
Hispanic	25,937	581	2.2%	9,352	640	6.8%	672	213	31.7%	921	424	46.0%
Other	905	19	2.1%	984	9	0.9%	40	6	15.0%	58	12	20.7%
Unknown	2,672	57	-	5,493	91	-	17	21	-	39	44	-
Sex												
Female	96,481	250	0.3%	16,775	118	0.7%	232	10	4.3%	474	15	2.7%
Male	33,273	1,422	4.3%	20,684	1,996	9.6%	1.476	536	36.3%	2,015	1,092	54.2%
Current Residence												
Austin	11,082	217	2.0%	3,100	306	9.9%	210	77	36.7%	234	116	49.6%
Dallas	21,581	467	2.2%	6,883	648	9.4%	314	104	33.1%	699	396	56.7%
Houston	29,227	563	1.9%	8,201	616	7.5%	435	152	34.9%	470	222	47.2%
Fort Worth	9,841	83	0.8%	3,159	134	4.2%	169	59	34.9%	244	106	43.4%
San Antonio	13,958	109	0.8%	4,049	164	4.1%	227	72	31.7%	268	120	44.8%
Risk Group*												
MSM	*	1,196	N/A	*	1,727	N/A	1,145	450	39.3%	1,356	961	70.9%

Table 4-2. HIV+ Persons among Diagnosed STD Cases, Texas, 2015

	Chlamydia			Gonorrhea			P&S Syphilis			EL Syphilis		
	Cases	Cases in PLWH	%	Cases	Cases in PLWH	%	Cases	Cases in PLWH	%	Cases	Cases in PLWH	%
Black MSM	*	440	N/A	*	684	N/A	301	145	48.2%	371	275	74.1%
Hispanic MSM	*	464	N/A	*	569	N/A	465	180	38.7%	519	382	73.6%
White MSM	*	246	N/A	*	400	N/A	341	102	29.9%	418	256	61.2%

* Sexual risk information is not routinely collected for chlamydia and gonorrhea cases

- Ongoing syphilis transmission is increasingly limited to MSM in Texas. MSM living with HIV comprise over a third of Primary & Secondary (P&S) and Early Latent (EL) syphilis diagnoses.
- This disparity may be due to higher biological risk of syphilis infection in PLWH or serosorting among MSM.

Table 4-3. Number and % of PLWH in 2015 with Tuberculosis Co-morbidity, by Sex

	TB Diagnoses Ever (1993-2015)			In 2015		
	PLWH	Number of PLWH with TB Diagnosis after HIV Diagnosis	%	Number of PLWH with TB Diagnosis in 2015	%	Rate per 100,000 population
Total PLWH	82,745	1,491	1.8%	43	100.0%	52.0
Age Group						
0-14	290	1	0.3%	0	0.0%	0.0

Table 4-3. Number and % of PLWH in 2015 with Tuberculosis Co-morbidity, by Sex

	TB Diagnoses Ever (1993-2015)			In 2015		
	PLWH	**Number of PLWH with TB Diagnosis after HIV Diagnosis**	**%**	**Number of PLWH with TB Diagnosis in 2015**	**%**	**Rate per 100,000 population**
15-24	3,983	10	0.3%	1	2.3%	25.1
25-34	14,917	101	0.7%	12	27.9%	80.4
35-44	19,763	354	1.8%	11	25.6%	55.7
45+	41,120	1,025	2.5%	19	44.2%	46.2
Race/Ethnicity						
White	22,184	145	0.7%	3	7.0%	13.5
Black	29,895	621	2.1%	17	39.5%	56.9
Hispanic	24,607	635	2.6%	19	44.2%	77.2
Other	836	48	5.7%	2	4.7%	239.2
Unknown	2,551	42	1.6%	2	4.7%	78.4
Sex						
Female	17,848	304	1.7%	9	20.9%	50.4
Male	64,897	1,187	1.8%	34	79.1%	52.4
Current Residence						
Austin	5,521	89	1.6%	5	11.6%	90.6
Dallas	19,793	356	1.8%	8	18.6%	40.4
Houston	26,041	521	2.0%	15	34.9%	57.6

Table 4-3. Number and % of PLWH in 2015 with Tuberculosis Co-morbidity, by Sex

	TB Diagnoses Ever (1993-2015)			In 2015		
	PLWH	**Number of PLWH with TB Diagnosis after HIV Diagnosis**	**%**	**Number of PLWH with TB Diagnosis in 2015**	**%**	**Rate per 100,000 population**
Fort Worth	5,396	89	1.6%	2	4.7%	37.1
San Antonio	6,096	82	1.3%	2	4.7%	32.8

- Persons living with HIV who also have latent tuberculosis (TB) infection are more likely to develop TB disease because the immune system is weakened.
- The rate of TB in PLWH is 10 times the rate of TB in the general population (4.9/100,000).
- Hispanics and persons of Asian races living with HIV are more likely to have TB disease, mainly due to a higher prevalence of latent TB infection in these populations as a result of TB being endemic in their countries of origin.

Epi Profile Section 5 - HIV-AIDS Deaths

- **Table 5-1.** Age-Adjusted Rate of Death due to Any Cause in the General Population per 100,000 in Texas by Race/Ethnicity, 2013
- **Table 5-2.** Cause of Death Rankings Among Adults Age 25-44 in Texas, 2013
- **Table 5-3.** Age-Adjusted Rate of Death Due to HIV per 100,000 Population, Texas, 2013
- **Table 5-4.** Age-Adjusted Rate of Death Due to Any Cause in People Living with HIV (PLWH) per 1,000 PLWH in Texas by Race/Ethnicity, 2013

Table 5-1. Age-Adjusted Rate of Death due to Any Cause in the General Population per 100,000 in Texas by Race/Ethnicity, 2013

Race/Ethnicity	Male Rate	Female Rate	Total Rate
White, non-Hispanic	918.7	680.7	790.7
Black, non-Hispanic	1,111.1	779.4	918.5
Hispanic, all Races	748.8	534.1	632.1
Other Race	484.8	373.0	424.3
Total	876.2	642.7	749.2

- Black males have the highest age-adjusted rate of death due to any cause in Texas. Higher rates of heart disease, diabetes, kidney failure and other conditions in Black Texans likely contribute to the higher mortality rate.

Table 5-2. Cause of Death Rankings Among Adults Age 25-44 in Texas, 2013

Cause of Death	All Races		White		Black		Hispanic		Other Race	
	Rank	Number	Rank	Number	Race	Number	Race	Number	Race	Number
Accidents	1	2,468	1	1,288	2	293	1	835	2	52
Malignant Neoplasms	2	1,326	3	568	4	193	2	486	1	79
Diseases of the Heart	3	1,151	4	498	1	294	3	330	4	29
Intentional Self-Harm (Suicide)	4	1,038	2	371	6	81	4	237	3	35
Assault (Homicide)	5	593	5	162	3	225	5	193	5	13
Chronic Liver Disease and Cirrhosis	6	276	6	129	*	12	6	198	7	7
Diabetes Mellitus	7	245	7	89	7	62	7	89	10	5
Cerebrovascular Diseases	8	229	8	80	8	53	8	86	6	10
Human Immunodeficiency Virus (HIV) Disease	**9**	**211**	*	**44**	**5**	**100**	**9**	**62**	**9**	**5**
Septicemia	10	127	10	45	*	29	10	51	*	2

* Not in the top 10 causes of death in this race group

- HIV is the 9th leading cause of death in Texans age 25-44; however, it is the 5th leading cause of death for Black Texans in this age group. Nearly half of the deaths due to HIV in 2013 occured in Blacks and almost 30% occurred in Hispanics.

Table 5-3. Age-Adjusted* Rate of Death Due to HIV per 100,000 Population, Texas, 2013**

Race/Ethnicity	Male Rate	Female Rate	Total Rate
White, non-Hispanic	1.9	0.4	0.6
Black, non-Hispanic	10.6	4.5	3.6
Hispanic, all Races	4.5	0.7	1.1
Other Race	0.3	***	<0.1
Total	3.5	1.1	2.3

* Rates are adjusted by age using the 2000 U.S. Standard Population (11 age groups, Distribution #1)
** Deaths due to HIV are those where HIV is listed as the underlying cause on an accompanying death certificate (ICD Codes B20-B24)
*** No deaths in Females of Other Race were reported in 2013

- Table 5-3 shows the age-adjusted rate of death due to HIV in persons living with HIV. The rate of HIV-associated mortality declined for all race and sex groups in 2013 compared to 2012, with the exception of Hispanic males (increase of 13%). The development of effective anti-HIV medications has allowed persons living with HIV to live longer and deaths are less frequently attributable to HIV. Racial disparities in deaths attributable to HIV could indicate disparities in access to effective medical care for HIV.

Table 5-4. Age-Adjusted* Rate of Death Due to Any Cause in People Living with HIV (PLWH) per 1,000 PLWH in Texas by Race/Ethnicity, 2013

Race/Ethnicity & Risk Group	Male Rate	Female Rate	Total Rate
White, non-Hispanic	13.5	13.6	13.7
Black, non-Hispanic	18.9	17.4	19.4
Hispanic, all Races	16.2	11.4	15.3

Table 5-4. Age-Adjusted* Rate of Death Due to Any Cause in People Living with HIV (PLWH) per 1,000 PLWH in Texas by Race/Ethnicity, 2013

Race/Ethnicity & Risk Group	Male Rate	Female Rate	Total Rate
Other Race	6.2	**	4.6
Men who have Sex with Men (MSM)	14.1	N/A	14.1
Persons who Inject Drugs (PWID)	21.7	22.2	22.2
MSM/PWID	18.4	N/A	18.4
Heterosexual	20.9	16.3	18.5
Pediatric	6.7	4.4	5.5
Adult Other	11.6	27.1	16.3
Total	17.1	18.0	17.3

* Rates are adjusted by age using the 2000 U.S. Standard Population (11 age groups, Distribution #1)
** No deaths in Females of Other Race were reported in 2013

- Table 5-4 shows the age-adjusted rate of death due to any cause in persons living with HIV . Cause of death in persons living with HIV can be attributed to other causes, including diseases associated with aging, as PLWH live longer. The highest rate of death in PLWH is found in Persons who Inject Drugs. This may be due to comorbidities associated with injection drug use, such as Hepatitis B and C. Higher rates of death among Female PLWH with a risk factor of Other is likely due to the relatively small number of total PLWH in this category.

Epi Profile Section 6 - HIV Incidence

- **Table 6-1.** Estimated HIV Incidence (New Acquired Infections), 2014, by Sex, Race, Age, and Mode of Transmission

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Table 6-1. Estimated HIV Incidence (New Acquired Infections), 2014, by Sex, Race, Age, and Mode of Transmission

		95% C.I.		
	Estimate	**Lower Bound**	**Upper Bound**	**Estimated Rate of New Infections per 100,000 population**
Total	4,611	3,897	5,326	16.8
Sex				
Male	3,911	3,284	4,538	28.7
Female	700	516	885	5.1
Race/Ethnicity				
White	1,160	906	1,413	9.6
Black	1,459	1,169	1,748	43.9
Hispanic	1,811	1,469	2,152	17.0
Other	182	97	268	12.7
Age at Infection				
13-24	1,407	1,087	1,727	29.6
25-34	1,647	1,333	1,961	41.1
35-44	880	664	1,097	23.8

Table 6-1. Estimated HIV Incidence (New Acquired Infections), 2014, by Sex, Race, Age, and Mode of Transmission

		95% C.I.		
	Estimate	**Lower Bound**	**Upper Bound**	**Estimated Rate of New Infections per 100,000 population**
45-54	515	339	391	14.7
55+	162	59	265	2.6
Mode of Transmission				
Male-Male Sexual Contact	3,469	2,897	4,041	553.9
Injection Drug Use	384	249	520	*
Heterosexual Transmission/Other	758	565	951	*

95% CI = 95% confidence interval

* Population estimate not available

- Table 6-1 This table shows the estimate of total HIV incidence that occurred in Texas in 2014. HIV Incidence differs from new diagnoses in that it is meant to estimate all newly acquired infections in a given time period, including those not yet diagnosed. The 95% confidence interval presented next to the count estimate represents the most likely range of values where the true number of incident infections lies.
- The largest number of incident infections are estimated to have occurred in MSM. The high number of new infections in Hispanic MSM likely reflects the growing proportion of Texas' Hispanic population (40% in 2015).
- The highest rate of new infections is estimated to occur in Black Texans and young persons age 25-34.

Epi Profile Section 7 - Targeted and Routine HIV Testing

- **Table 7-1.** DSHS Funded Targeted and Routine Testing in Texas, 2015

Table 7-1. DSHS Funded Targeted and Routine Testing in Texas, 2015

	Targeted Testing			Routine Testing			Total		
	Tests	**%**	**% Positive**	**Tests**	**%**	**% Positive**	**Tests**	**%**	**% Positive**
	53,418	100%	1.7%	133,162	100%	1.1%	186,580	100%	1.3%
Sex									
Male	36,101	68%	2.3%	58,546	44%	2.0%	94,647	51%	2.1%
Female	17,300	32%	0.5%	74,611	56%	0.4%	91,911	49%	0.5%
Unknown	17	<1%	0.0%	5	0%	0.0%	22	<1%	0.0%
Race									
White	13,087	24%	1.4%	27,164	20%	1.1%	40,251	22%	1.1%
Black	16,672	31%	2.0%	40,364	30%	2.1%	57,036	31%	2.1%
Hispanic	21,394	40%	1.6%	42,299	32%	0.5%	63,693	34%	0.9%
Other	2,031	4%	1.8%	9,157	7%	0.2%	11,188	<1%	0.5%
Unknown	234	0%	2.1%	14,178	11%	0.9%	14,412	<1%	0.9%
Age Group									
0-14 years	81	<1%	1.2%	876	<1%	0.3%	957	<1%	0.4%
15-24 years	16,631	31%	1.7%	29,226	22%	0.6%	45,857	25%	1.0%

Table 7-1. DSHS Funded Targeted and Routine Testing in Texas, 2015

	Targeted Testing			Routine Testing			Total		
	Tests	**%**	**% Positive**	**Tests**	**%**	**% Positive**	**Tests**	**%**	**% Positive**
25-34 years	19,480	36%	1.9%	30,167	23%	1.4%	49,647	27%	1.6%
35-44 years	8,898	17%	1.5%	24,051	18%	1.6%	32,949	18%	1.6%
45 + years	8,325	16%	1.4%	48,836	37%	1.1%	57,161	31%	1.1%
Unknown	3	0%	33.3%	6	<1%	0.0%	9	<1%	11.0%
Geography									
Austin TGA	10,881	22%	1.4%	17,227	13%	0.1%	28,108	15%	0.6%
Dallas EMA	12,959	26%	2.3%	30,311	22%	1.6%	43,270	23%	1.8%
Fort Worth TGA	4,895	9%	2.2%	36,953	28%	0.6%	41,848	22%	0.8%
Houston EMA	2,028	4%	3.3%	27,244	21%	2.4%	29,272	16%	2.5%
San Antonio TGA	9,551	19%	1.2%	0	0%	0.0%	9,551	5%	1.2%
Rest of Texas	13,104	26%	1.2%	21,427	16%	0.6%	34,531	19%	0.8%
Reported Risk									
MSM/PWID	590	1%	6.8%	3	<1%	0.0%	593	<1%	6.7%
MSM	17,531	32%	3.4%	377	<1%	3.7%	17,908	10%	3.4%
PWID	2,338	4%	0.7%	99	0%	28.3%	2,437	1%	1.8%
Hetero	22,236	41%	0.5%	34,022	26%	1.9%	56,258	30%	1.3%
Non-targeted	1,187	2%	0.6%	-	-	-	1,187	<1%	0.6%
Unknown	9,536	18%	1.4%	98,661	41%	0.8%	108,198	58%	0.9%

- DSHS funds two types of HIV testing efforts. Targeted testing sites offer HIV testing to persons at highest risk for HIV, such as Men who have Sex with Men (MSM). Routine testing is offered as

part of other medical care, such as during an emergency room visit for an unrelated health event.

- The majority of persons receiving routine HIV screening are not asked about their risks for HIV.
- The highest HIV positivity rates were found in populations with the highest prevalence rates of HIV, including Black Texans, MSM, and MSM who also inject drugs.
- Persons who test positive in targeted or routine screening programs may have already been identified as HIV positive previously because testing programs do not have the capacity to check testing records against HIV surveillance data.
- Beginning in 2015, persons testing positive through targeted and routine testing programs will be routinely matched to HIV Surveillance data to determine whether these are new diagnoses.

Epi Profile Section 8 - Indicators of HIV Risk in HIV-negative Persons at High Risk for HIV

- **Table 8-1.** HIV Risk Behaviors in HIV-Negative MSM, Dallas, 2014, Unweighted
- **Table 8-2.** HIV Risk Behaviors in HIV-Negative IDU, Dallas, 2012, Unweighted
- **Table 8-3.** HIV Risk Behaviors in HIV-Negative in High Risk Heterosexuals, Dallas, 2013, Unweighted

Data in this section comes from the Dallas data collection site of the National HIV Behavioral Survey (NHBS). This information may not reflect the state as a whole. For more information, please see the section Data Sources and Notes.

Table 8-1. HIV Risk Behaviors in HIV-Negative MSM, Dallas, 2014, Unweighted

MSM		Average number of male sex partners in past 12 months	Had condomless anal sex with a male partner in the past 12 months		Had condomless anal sex with a male partner whose HIV status was unknown in the past 12 months		Used injection or non-injection drugs in the past 12 months		Had condomless anal sex with an HIV-positive partner in the past 12 months		Self-reported syphilis infection in the past 12 months	
	N	N	N	%	N	%	N	%	N	%	N	%
Race/Ethnicity												
White	141	8	89	63%	25	18%	83	59%	13	9%	52	37%
Black	111	5	60	54%	25	23%	59	53%	3	3%	30	27%
Hispanic	86	6	54	63%	21	24%	47	55%	3	3%	33	38%
Other	26	6	20	77%	8	31%	20	77%	0	0%	11	42%
Total*	368	7	227	62%	79	21%	211	57%	19	5%	129	35%
Age												

Table 8-1. HIV Risk Behaviors in HIV-Negative MSM, Dallas, 2014, Unweighted

MSM		Average number of male sex partners in past 12 months	Had condomless anal sex with a male partner in the past 12 months		Had condomless anal sex with a male partner whose HIV status was unknown in the past 12 months		Used injection or non-injection drugs in the past 12 months		Had condomless anal sex with an HIV-positive partner in the past 12 months		Self-reported syphilis infection in the past 12 months	
	N	N	N	%	N	%	N	%	N	%	N	%
0-14	0	-	-	-	-	-	-	-	-	-	-	-
15-24	65	8	41	63%	13	20%	41	63%	4	6%	25	38%
25-34	116	8	82	71%	34	29%	65	56%	10	9%	50	43%
35-44	89	5	53	60%	18	20%	50	56%	2	2%	33	37%
45+	98	5	51	52%	14	14%	55	56%	3	3%	21	21%
Total	368	7	227	62%	79	21%	211	57%	19	5%	129	35%

* Four participants whose race/ethnicity was missing were included in the total

- In Texas, young black MSM experience the highest rates of new HIV diagnoses (see Section 10 *Men who have Sex with Men*). However, NHBS data indicates a higher proportion of HIV-negative White MSM (63%) and Hispanic MSM (63%) in Dallas engage in high-risk behaviors compared to HIV-negative Black MSM (54%). This discrepancy is potentially explained by the existing high prevalence of HIV among Black MSM (see Table 10-2. *New HIV diagnoses in MSM by age group within race/ethnicity, 2015*). Though White and Hispanic MSM seem to be engaging in riskier behavior, they may have less exposure to HIV in sexual networks consisting of other White and Hispanic MSM, among whom HIV prevalence is lower.

Table 8-2. HIV Risk Behaviors in HIV-Negative IDU, Dallas, 2012, Unweighted

IDU		Average number of sex partners in the past 12 months*	Shared needle in past 12 months		Sharing of drug paraphernalia in past 12 months		Exchanged money or drugs for sex in past 12 months		Had condomless sex in the past 12 months	
	N	**N**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Race/Ethnicity										
White	52	22	28	54%	35	67%	16	31%	13	25%
Black	426	4	161	38%	288	68%	165	39%	212	50%
Hispanic	13	12	5	38%	11	85%	11	85%	7	54%
Other	15	2	8	53%	9	60%	6	40%	6	40%
Total	506	6	202	40%	343	68%	198	39%	238	47%
Age										
0-14	0	-	-	-	-	-	-	-	-	-
15-24	4	6	3	75%	3	75%	1	25%	2	50%
25-34	48	10	24	63%	29	76%	22	58%	14	37%
35-44	54	24	26	48%	39	72%	28	52%	24	44%
45+	410	3	149	36%	272	66%	147	36%	198	48%
Total	506	6	202	40%	343	68%	198	39%	238	47%

* This analysis excludes females who inject drugs who reported sex exclusively with other females

- Among newly diagnosed people with HIV in Texas, 5% acquired their infection through injection drugs use (IDU). Forty-three percent of these diagnoses were in Black Texans and 38% were over

45 years of age (see Section 2. *New HIV Diagnoses*). Comparatively, over 80% of HIV-negative Persons who Inject Drugs recruited for this Dallas-based survey were over the age of 45 and 84% were Black. Injecting substances increases the risk of HIV transmission through exposure to blood via sharing needles and equipment, and certain injectable drugs lower inhibition and increase the likelihood of engaging in high-risk sexual behavior. Findings from the NHBS survey show that among HIV-negative people who inject drugs in Dallas, a large proportion of respondents reported sharing needles (40%) or other injection equipment (68%), exchanging money or drugs for sex (39%), and having condomless sex (47%) all in the last 12 months. All of these activities are also risk factors for Hepatitis C and B infections, which can increase the chance of complications from existing HIV infection.

Table 8-3. HIV Risk Behaviors in HIV-Negative in High Risk Heterosexuals, Dallas, 2013, Unweighted

High Risk Heterosexuals*		Average number of sex partners of the opposite sex in the past 12 months	Had condomless sex with a partner of the opposite sex in the past 12 months		Exchanged money or drugs for sex in past 12 months		Had condomless sex with an HIV-positive partner in the past 12 months	
	N	**N**	**N**	**%**	**N**	**%**	**N**	**%**
Race/Ethnicity								
White	22	5	12	55%	3	14%	83	59%
Black	467	4	195	42%	103	22%	59	53%
Hispanic	49	2	22	45%	3	6%	47	55%
Other	7	6	4	57%	1	14%	20	77%
Total	545	3	233	43%	110	20%	211	57%
Age								
0-14	0	-	-	-	-	-	-	-

Table 8-3. HIV Risk Behaviors in HIV-Negative in High Risk Heterosexuals, Dallas, 2013, Unweighted

High Risk Heterosexuals*		Average number of sex partners of the opposite sex in the past 12 months	Had condomless sex with a partner of the opposite sex in the past 12 months		Exchanged money or drugs for sex in past 12 months		Had condomless sex with an HIV-positive partner in the past 12 months	
	N	**N**	**N**	**%**	**N**	**%**	**N**	**%**
15-24	107	3	49	46%	11	10%	0	0%
25-34	164	3	57	35%	25	15%	0	0%
35-44	93	4	43	46%	27	29%	0	0%
45+	181	3	84	46%	47	26%	1	1%
Total	545	3	233	43%	110	20%	1	0%

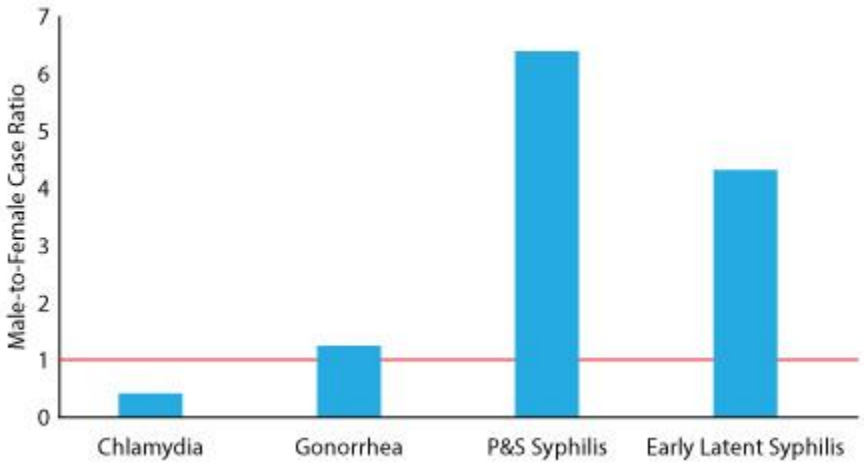
* For HIV surveillance purposes, a high risk heterosexual is a male or female whose sexual partners are known to be HIV-infected or at high risk for HIV (partner has a history of sexual contact with bi-sexual male for females, exchanging money or drugs for sex, IDU, hemophiliacs, HIV+ transfusion recipients, or other HIV+ persons of unknown risk).

- Findings from this survey showed that 43% of high-risk HIV-negative heterosexual participants reported having condomless sex with a partner of the opposite sex in the last 12 months. Twenty percent of those surveyed reported that they exchanged money or drugs for sex in the past 12 months. Those over the age of 35 were more likely to report exchanging sex for money or drugs (29% of 35 to 44 year olds and 26% of those 45 or older).
- Monitoring the risk behaviors of heterosexuals at high-risk for HIV is important because 22% of newly diagnosed people with HIV in 2015 in Texas reported acquiring HIV through heterosexual contact. Blacks were over-represented in this survey as 85% of high-risk heterosexual respondents were Black. By comparison, a lower proportion (56%) of heterosexuals newly diagnosed with HIV in Texas were Black. These findings from Dallas may not be representative of HIV risk behaviors in all high-risk heterosexuals in Texas, especially high-risk Texans of other races.

Epi Profile Section 10 - Men who have Sex with Men (MSM)

- **Figure 10-1.** Ratio of Male to Female STD Diagnoses, Texas, 2015
- **Table 10-1.** Five Year Cumulative Trends in New HIV Diagnoses in Texas among MSM by Race/Ethnicity and Age Group
- **Table 10-2.** New HIV Diagnoses in MSM by Age Group Within Race/Ethnicity, 2015

Figure 10-1. Ratio of Male to Female STD Diagnoses, Texas, 2015



Data for Figure 10-1

- A ratio of 1 indicates that approximately equal numbers of males and females were diagnosed with a particular STD.
- In 2015, gonorrhea, and Primary, Secondary and Early Latent syphilis were diagnosed more frequently in males compared to females. 2015 is the first year that gonorrhea diagnoses in males has exceeded the number of diagnoses in females. This is most likely due to an increase in screening rates among MSM, and potentially increased transmission among MSM.
- Chlamydia is diagnosed more frequently in females due to targeted screening in young females age 15-24 and lower chlamydia screening rates in males.

Table 10-1. Five Year Cumulative Trends in New HIV Diagnoses in Texas among MSM by Race/Ethnicity and Age Group

	Cumulative Through 2010		2011		2012		2013		2014		2015		Total 1980-2015	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
All MSM	63,577	100%	2,844	100%	2,976	100%	2,985	100%	3,092	100%	3,141	100%	76,618	100%
Race														
White MSM	31,197	49.1%	651	22.9%	697	23.4%	711	23.8%	710	23.0%	706	22.5%	34,672	44.1%
Black MSM	14,062	22.1%	849	29.9%	885	29.7%	945	31.7%	969	31.3%	1,009	32.1%	18,719	23.8%
Hispanic MSM	16,828	26.5%	1,165	41.0%	1,251	42.0%	1,190	39.9%	1,284	41.5%	1,297	41.3%	23,015	29.3%
Other MSM	436	0.7%	52	1.8%	41	1.4%	54	1.8%	55	1.8%	66	2.1%	706	0.9%
Unknown Race MSM	1,055	1.7%	127	4.5%	102	3.4%	85	2.8%	74	2.4%	63	2.0%	1,506	1.9%
Age Group														
0-14 MSM	19	<0.1%	1	<0.1%	2	0.1%	4	0.1%	1	<0.1%	0	0.0%	27	<0.1%
15-24 MSM	7,827	12.3%	797	28.0%	841	28.3%	845	28.3%	937	30.3%	911	29.0%	12,158	15.5%
25-34 MSM	25,498	40.1%	872	30.7%	989	33.2%	1,042	34.9%	1,086	35.1%	1,158	36.9%	30,646	39.0%

Table 10-1. Five Year Cumulative Trends in New HIV Diagnoses in Texas among MSM by Race/Ethnicity and Age Group

	Cumulative Through 2010		2011		2012		2013		2014		2015		Total 1980-2015	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
35-44 MSM	20,399	32.1 %	616	21.7 %	599	20.1 %	543	18.2 %	534	17.3 %	537	17.1 %	23,230	29.5 %
45+ MSM	9,834	15.5 %	557	19.6 %	545	18.5 %	535	17.3 %	535	17.3 %	535	17.0 %	12,559	16.0 %

- For the first 30 years of the HIV epidemic, over half of HIV cases in MSM were diagnosed among White MSM; MSM of color now account for a majority of new HIV diagnoses in MSM.
- A greater proportion of new HIV diagnoses in MSM are now among 15-24 year olds compared to past years, which may reflect increased availability and frequency of testing compared to past years or younger age at infection for this group.

Table 10-2. New HIV Diagnoses in MSM by Age Group Within Race/Ethnicity, 2015

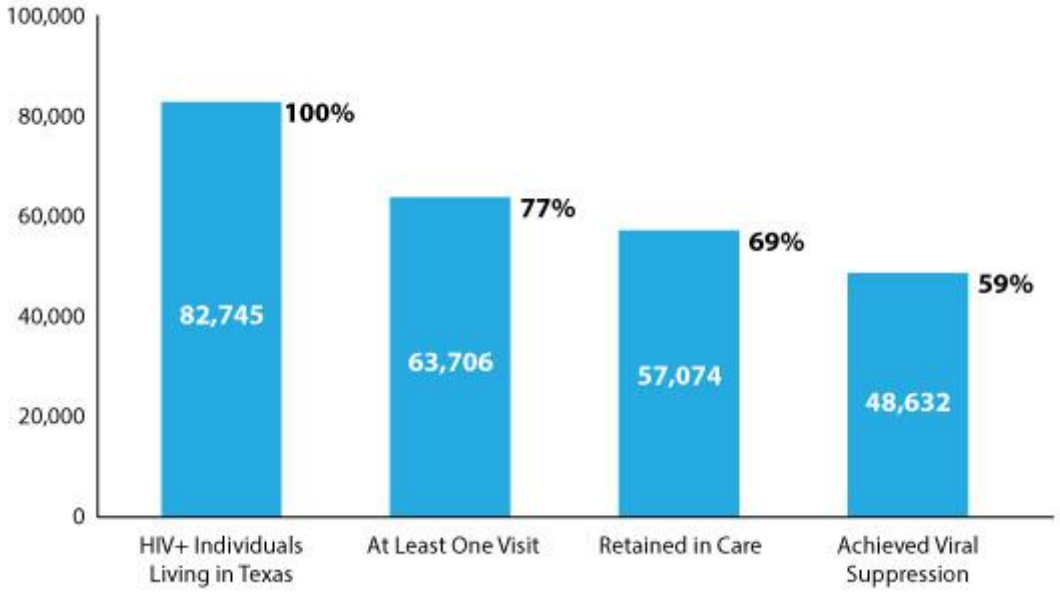
	White		Black		Hispanic		Other		Unk	Total	
	N	Rate	N	Rate	N	Rate	N	Rate	N	N	Rate
18-24	108	333.3	375	3,317.2	354	919.2	18	390.3	22	877	1,011.7
25-34	256	513.7	379	3,023.1	478	957.1	27	331.3	20	1,160	1,158.4
35-44	126	284.5	120	1,038.7	264	612.4	15	202	12	537	506.1
45+	215	140.6	120	441.2	184	247.6	7	21.8	10	536	534.7
Total	704	252.3	994	1,589.4	1,280	621.9	66	195.6	64	3,110	535.8

- Estimates of the MSM population by race and age group in Texas has allowed for calculation of the rate of new HIV diagnoses in MSM.
- 3.3% of Black MSM age 18-24 and 3.0% of HIV-negative Black MSM age 25-34 were diagnosed with HIV in 2015. Because diagnoses do not reflect all infections within a population, the rate of new infections in this group is likely higher.

Epi Profile Section 11 - HIV Treatment Cascade

- **Figure 11-1.** Texas HIV Treatment Cascade, 2015

Figure 11-1. Texas HIV Treatment Cascade, 2015



HIV+ Individuals Living in Texas - PLWH aware of their HIV diagnosis and residing in Texas at the end of 2015

At Least One Visit - Number of PLWH with a met need (at least one: medical visit, ART prescription, VL test, or CD4 test) in 2015

Retained in Care - Number of PLWH with at least 2 visits or labs, at least 3 months apart or suppressed at end of 2015

Achieved Viral Suppression - PLWH whose last viral load test value of 2015 was ≤ 200 copies/mL

- The HIV Treatment Cascade is a visual representation of the HIV continuum of care among Texans living with HIV. Each successive bar demonstrates the steps between HIV diagnosis and achieving viral suppression. A suppressed viral load is associated with improved health

outcomes for PLWH and lowered risk of transmission. Persons living with HIV who have not been diagnosed or reported are not included in this cascade.

- The HIV Treatment Cascade can help identify stages in the care continuum where patients are not receiving the standard of care. DSHS creates Treatment Cascades for demographic groups and geographic areas to highlight the state of HIV care for PLWH across the state. These cascades are available upon request from TBHIVSTDdata@dshs.texas.gov.

Epi Profile - Data Sources and Notes

This epidemiologic profile presents information on known cases of Human Immunodeficiency Virus (HIV) in Texas diagnosed through December 31, 2015 and reported as of June 27, 2016. The data presented on people living with HIV (PLWH), or prevalence, represent the cumulative number of people diagnosed with HIV who are not known to have died. The section on new HIV diagnoses includes all newly diagnosed cases of HIV disease regardless of their stage of disease at diagnosis. Statistics on new diagnoses of HIV are based on the earliest available diagnosis date.

The primary source of information for this report comes from routine disease surveillance. Texas laws and regulations require that certain health care professionals and laboratories report test results or results of diagnostic evaluation that indicate infection with HIV. These results are maintained in Texas' Electronic HIV/AIDS Reporting System (eHARS). eHARS does not include those unaware of their infection status or those who tested positive for HIV infection solely through anonymous testing.

A Note on Mode of Exposure

The mode of exposure assigned to each HIV case represents the most likely way that the individual became infected with HIV based on the risk behaviors documented in the course of disease reporting or investigation. Nearly one-third of new HIV cases are reported without an identified risk factor. DSHS uses multiple imputation to assign a risk factor for these cases. Multiple imputation replaces missing risk factors with a range of possible values. Estimates of population sizes for risk behavior groups, with the exception of Men who have Sex with Men (MSM), are not available at this time; therefore, case rates were not calculated for Persons who Inject Drugs (PWID), persons engaging in high-risk heterosexual sex, and MSM/PWID.

Data on STD/HIV and TB/HIV Comorbidity

A cross-registry match was performed between eHARS and Texas' Sexually Transmitted Disease (STD) and tuberculosis (TB) registries to identify individuals co-infected with TB or any of three reportable STDs (chlamydia, gonorrhea, and syphilis) during 2015. A PLWH was considered to be co-infected if their co-infection was diagnosed ≥30 days prior to their HIV diagnosis or any time after their HIV diagnosis.

Medical Monitoring Project (MMP)

MMP collects behavioral and clinical information from a nationally representative sample of adults receiving medical care for HIV infection in outpatient facilities in the United States and Puerto Rico. The Texas and Houston MMP sites are two of 23 project areas that were funded to conduct data collection activities for the 2014 MMP data collection cycle. Patients who received medical care during January–April 2014 at an MMP participating facility were interviewed once during June 2014–April 2015regarding HIV care experiences, health behaviors, risk behaviors, and unmet need during the 12 months preceding the interview. In addition, patients' medical records were abstracted for documentation of medical care including prescription of ART and HIV viral load and clinical outcomes for the 24 months preceding the

interview. All percentages were weighted for the probability of selection and adjusted for nonresponse bias.

National HIV Behavioral Surveillance (NHBS)

NHBS is an ongoing behavioral surveillance system that collects cross-sectional data among populations at high risk for acquiring HIV, including men who have sex with men (MSM), persons who inject drugs PWID), and heterosexuals at high risk for HIV infection (HET). NHBS activities are implemented in one-year cycles so that data are collected from each risk group every three years; these study cycles are referred to as NHBS- MSM, NHBS-IDU (PWID), and NHBS-HET. Individuals who consent to participate undergo an anonymous interview, receive an HIV test and are given a monetary incentive for their participation.

A Note on Counts and Rates

In looking at this profile, it is important to consider the total number of cases in addition to the number of cases relative to the size of the population in question (or rate). Therefore, where possible, we have included case rates to illustrate this point. The standard case rate when dealing with HIV is the number of people with HIV per 100,000 members of that particular population. Comparing case rates shows the relative difference of the burden of disease across groups with different population sizes allowing us to see which demographic groups and geographic areas are more vulnerable to HIV infection.

Epi Profile - Table Appendix

Data for Figure 2-1

HIV in Texas; People living with HIV, new HIV diagnoses, and deaths due to HIV, 2006 - 2015										
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
New Diagnoses	3,927	4,066	4,124	4,360	4,478	4,322	4,353	4,340	4,440	4,486
PLWH	54,491	57,323	60,273	64,118	67,509	70,464	73,034	76,638	80,073	82,745
Deaths	1,622	1,593	1,421	1,553	1,434	1,392	1,431	1,228		

Data for Figure 2-2

Rate of New HIV Diagnoses in Texas by Race/Ethnicity, 2006 - 2015										
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
White	8.6	8.2	8.4	8.2	7.9	7.5	7.6	7.7	7.6	7.8
Black	57.0	56.7	58.4	59.1	59.0	52.4	51.1	51.0	50.4	49.8
Hispanic	14.7	15.6	14.8	15.9	16.4	16.4	16.5	15.7	16.3	16.0
Other	3.6	4.3	4.6	3.9	5.1	6.3	5.2	5.9	5.9	6.5

Data from Figure 2-3

Annual Number of New HIV Diagnoses in Texas by Age Group, 2006 - 2015										
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
0-14	19	28	19	25	19	30	25	21	20	17

Annual Number of New HIV Diagnoses in Texas by Age Group, 2006 - 2015										
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
15-24	661	741	845	975	1,052	1,030	1,056	1,031	1,137	1,097
25-34	1,181	1,210	1,241	1,312	1,319	1.260	1,370	1,434	1,455	1,542
35-44	1,170	1,162	1,091	1,034	1,042	962	917	869	896	869
45+	896	925	928	981	1,046	1,040	985	985	932	961

Data for Figure 2-4

New HIV Diagnoses in Texas by Mode of Exposure, 2006 - 2015										
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
MSM	2,089	2,247	2,422	2,728	2,818	2,844	2,977	2,986	3,092	3,141
PWID	512	483	382	330	323	263	271	211	237	248
MSM/PWID	213	169	123	107	139	130	103	127	124	128
Heterosexual	1,096	1,142	1,178	1,173	1,180	1,057	979	1,000	967	952
Pediatric	12	24	18	22	19	28	23	17	20	17
Adult Other	6	1	1	1	0	0	0	0	0	0

Data for Figure 3-1

Percent of PLWH in Texas by Mode of Exposure		
	N	**%**
MSM	49,077	59.3%
IDU	8,640	10.4%
MSM/IDU	4,390	5.3%
Heterosexual	19,696	23.8%
Pediatric	831	1.0%
Adult Other	110	0.1%

Data for Figure 4-1

Chlamydia, Gonorrhea, and Primary & Secondary Syphilis cases and incidence rates among PLWH in Texas, 2008-2015								
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Chlamydia								
Cases	482	561	646	787	902	1,071	1,414	1,672
Rate	807.8	883.6	966.0	1,126.5	1,243.8	1,407.8	1,779.5	2,080.7
Gonorrhea								
Cases	624	643	786	931	973	1,288	1,636	2,114
Rate	1,045.7	1,012.8	1,175.4	1,332.6	1,341.7	1,693.0	2,085.9	2,554.8
Primary & Secondary Syphilis								
Cases	279	330	285	325	515	485	552	546
Rate	467.6	519.8	426.2	465.2	710.1	637.5	694.7	659.9

Data for Figure 10-1

Ratio of Male to Female STD Diagnoses, Texas, 2015	
	Male-Female Case Ratio
Chlamydia	0.4
Gonorrhea	1.2
P&S Syphilis	6.4
Early Latent Syphilis	4.3